Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

receiving, from a user, a desired end state associated with an autonomic computing system and a set of resource relationships associated with a set of resources for accomplishing the desired end state;

discovering a set of implicit relationships associated with at least the set of resources;

determining, in response to the receiving, policy definitions for [[an]] achieving the desired end state associated with the autonomic computing system based on the set of resource relationships received from the user and the implicit relationships that have been discovered;

monitoring applicable resources for status information;

determining if the autonomic computing system is at [[a]] the desired end state; and

dynamically modifying resource states, by sending an instruction for [[the]] at least one resource to perform an available action based on the policy definitions, in response to determining the autonomic computing system is not at the desired end state.

2. (Currently Amended) The method of claim 1, wherein the policy definitions can specify at least one of:

      an association between a resource and any other set of resources <u>for achieving the desired end state</u> ; and

      a desired state for a resource or set of resources <u>for achieving the desired end state</u>.

3. (Original)   The method of claim 2, wherein the association between a resource and any other set of resources comprise at least one of:

      a start order among resources;

      a stop order among resources;

      a prioritization between resources;

      a conditional activation of policies; and

      a location limitation of resources.

4. (Currently Amended) The method of claim 1, further comprising:

      receiving resource status information from available resources; and

      continuing to determine if the autonomic computing system is at the desired end state and modifying the resource states, by sending an instruction for [[the]] <u>at least one</u> resource to perform an available action <u>based on the policy definitions</u>, until the autonomic computing system has reached the desired end state.

5. (Canceled)

6. (Currently Amended) The method of claim 1, wherein the ~~determining policy definitions for an autonomic computing system~~ <u>discovering a set of implicit relationships</u> further comprises:

      <u>real-time</u> harvesting of implicit relationships between resources through self discovery.

7. (Currently Amended) The method of claim 1, wherein the determining policy definitions for an autonomic computing system further comprises determining underlying relationships among members of a resource group <u>defined by the user</u>.

8. (Original)   The method according to claim 7, wherein the members of the resource group are distributed within a heterogeneous cluster.

9. (Currently Amended)   A computer readable ~~medium~~ <u>storage product</u> comprising computer instructions for performing the following:

    <u>receiving, from a user, a desired end state associated with an autonomic computing system and a set of resource relationships associated with a set of resources for accomplishing the desired end state</u>;

    <u>discovering a set of implicit relationships associated with at least the set of resources</u>;

    determining<u>, in response to the receiving,</u> policy definitions for [[an]] <u>achieving the desired end state associated with the</u> autonomic computing system <u>based on the set of resource relationships received from the user and the implicit relationships that have been discovered</u>;

    monitoring applicable resources for status information;

    determining if the autonomic computing system is at [[a]] <u>the</u> desired end state; and

    <u>dynamically</u> modifying resource states, by sending an instruction for [[the]] <u>at least one</u> resource to perform an available action<u> based on the policy definitions</u>, in response to determining the autonomic computing system is not at the desired end state.

10. (Currently Amended)   The computer readable ~~medium~~ <u>storage product</u> of claim 9, wherein the policy definitions can specify at least one of:

an association between a resource and any other set of resources <u>for achieving the desired end state</u> ; and

a desired state for a resource or set of resources <u>for achieving the desired end state</u>.

11. (Currently Amended)   The computer readable ~~medium~~ <u>storage product</u> of claim 10, wherein the association between a resource and any other set of resources comprise at least one of:

a start order among resources;

a stop order among resources;

a prioritization between resources;

a conditional activation of policies; and

a location limitation of resources.

12. (Currently Amended)   The computer readable ~~medium~~ <u>storage product</u> of claim 9, further comprising computer instructions for performing the following:

receiving resource status information from available resources; and

continuing to determine if the autonomic computing system is at the desired end state and modifying the resource states, by sending an instruction for [[the]] <u>at least one</u> resource to perform an available action <u>based on the policy definitions</u>, until the autonomic computing system has reached the desired end state.

13. (Canceled)

14. (Currently Amended)   The computer readable ~~medium~~ <u>storage product</u> of claim 9, wherein the ~~determining policy definitions for an autonomic computing system~~ <u>discovering a set of implicit relationships</u> further comprises:

      <u>real-time</u> harvesting of implicit relationships between resources through self discovery.

15. (Currently Amended)   The computer readable ~~medium~~ <u>storage product</u> of claim 9, wherein the determining policy definitions for an autonomic computing system further comprises determining underlying relationships among members of a resource group <u>defined by the user</u>.

16. (Currently Amended) The computer readable ~~medium~~ <u>storage product</u> according to claim 15, wherein the members of the resource group are distributed within a heterogeneous cluster.

17. (Currently Amended)   An autonomic computing system resource manager comprising:

memory for storing at least one policy definition;

a resource monitor, communicatively coupled with at least one resource in an autonomic computing system and with the memory, for monitoring, and communicating data with, the at least one resource;

a policy generator, communicatively coupled with the memory, and with the resource harvester monitor, for determining policy definitions for achieving a user-defined desired end state associated with the autonomic computing system based on a set of resource relationships received from a user and implicit relationships associated with the set of resources, and providing, based on the policy definitions, in the memory a representation of a system-wide graph of available actions corresponding with the at least one resource in the autonomic computing system; and

an automation engine; communicatively coupled to the resource monitor and the memory, for communicating available actions to the at least one resource in order for the autonomic computing system to establish and maintain a desired end state.

18. (Previously presented)   The autonomic computing system resource manager of claim 17, further comprising:

a resource harvester, communicatively coupled with the at least one resource, the resource monitor, and the policy generator, for harvesting implicit relationships between resources in the autonomic computing system via self discovery.

19. (Original) The autonomic computing system resource manager of claim 17, wherein:

the policy generator further for specifying implicit relationships between resources in the autonomic computing system.

20. (Original) The autonomic computing system resource manager of claim 19, wherein the policy generator further for specifying implicit relationships between resources that are distributed within a heterogeneous cluster in the autonomic computing system.

21. (Original) The autonomic computing system resource manager of claim 17, wherein:

      the policy generator for creating at least one policy definition specified at least in part by a user of the autonomic computing system.

22. (Original) The autonomic computing system resource manager of claim 17, wherein:

      the policy generator for creating at least one policy definition determined at least in part by autonomic computing system self discovery.

23. (Currently Amended)   An apparatus comprising:

a cluster resource manager, for receiving, from a user, a desired end state associated with an autonomic computing system and a set of resource relationships associated with a set of resources for accomplishing the desired end state, discovering a set of implicit relationships, based on real time harvesting through self discovery, associated with at least the set of resources, determining policy definitions for achieving the desired end state an autonomic computing system based on the set of resource relationships received from a user and the implicit relationships that have been discovered, determining a set of available actions, monitoring at least one resource in the autonomic computing system for status information, determining if the autonomic computing system is at a desired end state, and modifying resource states of the at least one resource, by sending at least one instruction for the at least one resource to perform an available action based on the policy definitions , in response to determining the autonomic computing system is not at the desired end state; and

at least one network interface card, communicatively coupled with the cluster resource manager and the at least one resource, for communicating information between the cluster resource manager and the at least one resource in the autonomic computing system.

24. (Currently Amended)   An autonomic computing system comprising:

     at least one distributed resource; and

     an autonomic computing system resource manager comprising:

          memory for storing at least one policy definition;

          a resource monitor, communicatively coupled with at least one resource in an autonomic computing system and with the memory, for monitoring, and communicating data with, the at least one resource;

a policy generator, communicatively coupled with the memory, and with the resource ~~harvester~~ monitor, for determining policy definitions for achieving a user-defined desired end state associated with the autonomic computing system based on a set of resource relationships received from a user and implicit relationships associated with the set of resources, and providing, based on the policy definitions, in the memory a representation of a system-wide graph of available actions corresponding with the at least one resource in the autonomic computing system; and

     an automation engine, communicatively coupled with the resource monitor and the memory, for communicating available actions to the at least one distributed resource in order for the autonomic computing system to establish and maintain a desired end state.